

Application No. 09/636,286

RD-27791

REMARKS

Claims 1 to 12 and 16 to 21 are pending. Claims 15, 22 to 27, 30 to 33, 40 and 42 to 79 are canceled without prejudice or disclaimer.

Claims 22 to 27, 30 to 33, 40 and 42 to 79 were rejected under 35 U.S.C. §112, first paragraph. These claims are canceled without prejudice or disclaimer. The rejection of claims 22 to 27, 30 to 33, 40 and 42 to 79 under 35 U.S.C. §112, first paragraph should be withdrawn.

Claims 1 to 12, 15 to 27, 30 to 33, 40 and 42 to 79 were rejected under 35 U.S.C. §112, second paragraph.

With respect to claims 1 to 12 and 15 to 21 (15 is now canceled), the January 16, 2004 Final Rejection states:

Claim 1 and all claims dependent therefrom are indefinite due to the lack of clarity of the claim language failing to recite a final process step, which agrees back with the preamble.

January 16, 2004 Final Rejection, page 4.

Applicants know of no 35 U.S.C. §112, second paragraph requirement that "a final process step... agrees back with the preamble." Nonetheless, in order to obtain an early allowance in this case, Applicants have amended claim 1 to recite "executing a genetic algorithm based on said catalytic property of said entities to identify a second population of improved catalytic mixture entities" to correspond to the claim 1 preamble..

The amendment of claim 1 to include a preamble-agreeable final step should overcome this basis of the 35 U.S.C. §112, second paragraph rejection of claim 1 and correspondingly should overcome this basis of the 35 U.S.C. §112, second paragraph rejection of dependent claims 2 to 12 and 16 to 21.

As a further basis of 35 U.S.C. §112, second paragraph rejection, the January 16, 2004 Final Rejection states:

Application No. 09/636,286

RD-27791

Claims i, 4-11, 22, 23, 26, 40, 44-52, 61, 64-72, and all claims dependent therefrom recite the phrase "a second population of entities"/"a third population of entities" which is vague and indefinite. Applicants cite McGraw-Hill Dictionary of Scientific and Technical Terms, 5th Ed., p 1548 (1994) for the definition of "population" as "[a] specified set of objects or outcomes to be measured or observed" and then cites Merriam Webster's Collegiate Dictionary, 10th Ed., e 387 (1993) for the definition of "entity" which is stated to be "something that has separate population of entities with favorable catalytic properties". There is no indication "entities of an improved catalytic system" are identified.

January 16, 2004 Final Rejection, pages 4 to 5.

Again, Applicants have amended claim 1 to recite a final step of "executing a genetic algorithm based on said property of said entities to identify a second population of improved catalytic mixture entities," which should address the rejection statement that "[t]here is no indication "'entities of an improved catalytic system' are identified."

These claim 1 amendments should overcome the 35 U.S.C. §112, second paragraph rejection of claim 1 and dependent claims 2 to 12 and 16 to 21. The rejection of claims 1 to 12, 15 to 27, 30 to 33, 40 and 42 to 79 under 35 U.S.C. §112, second paragraph should be withdrawn.

Claims 1 to 12 were rejected under 35 U.S.C. §102(b) over Singh et al. Claim 15 was not rejected under 35 U.S.C. §102(b). The limitation of claim 15 has been incorporated into claim 1. The incorporation of the non-rejected claim 15 limitation into claim 1 should overcome the rejection of claim 1 and dependent claims 2 to 12. The rejection of claims 1 to 12 under 35 U.S.C. §102(b) over Singh et al. should be withdrawn.

Applicants vigorously contest all rejections of the claims stated in the Final Rejection. The current amendments are made only to obtain an early allowance. The cancellation of claims is without prejudice or disclaimer and Applicants retain the right to reinstate the claims if the present claims are not allowed or to re-assert the canceled claims in division or continuation-in-part applications.

Claim 2 has been amended to overcome the objections based on "(III)."

Application No. 09/636,286

RD-27791

This Amendment should be entered. The Amendment only clarifies claim 1 by adding preamble language to the claim body to overcome the 35 U.S.C. §112, second paragraph rejection and by incorporating claim 15 (which was not rejected) to overcome the 35 U.S.C. §102(b) rejection over Singh et al. Substantially the amendments reflect suggestions of the office action to overcome the rejections. They add no new issues.

The Amendment cancels claims thereby reducing the issues. Desirability of the Amendment became apparent only upon review of the pending Office Action. The Amendment places the application in condition for allowance. Thus, entry of the Amendment is requested under 37 CFR §1.116.

In view of the foregoing amendments and remarks, reconsideration and allowance of claims 1 to 12 and 16 to 21 are respectfully requested.

Should the Examiner believe that any further action is necessary in order to place this application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Philip D. Freedman

Reg. No. 24,163

Philip D. Freedman PC

Customer Number 25101

P.O. Box 19076

Alexandria, Virginia 22320

(703) 706-5327

Email: tekesq@tekesq.com

Alexandria, Virginia

02 MAR 2004